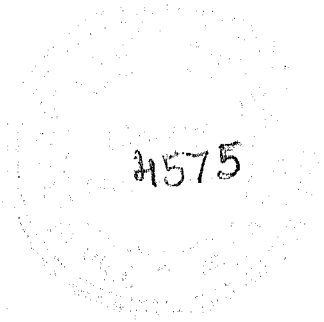


LAND AS A RESOURCE FOR DEVELOPING A NEW CITY :

Rhetoric, Operationalization and Lessons From New Bombay

H. S. VERMA

**GIRI INSTITUTE OF DEVELOPMENT STUDIES
LUCKNOW**



M
711.415
VER

Land As a Resource For Developing a New City :

Rhetoric, Operationalization and Lessons From New Bombay*

H.S. Verma

Recent spectacular growth in urban population without a proportionate increase in the number of new cities has resulted in, among other things, a general decline in the quality of urban life in India. Planning of new cities, lock stock and barrel, has consequently come to assume dimensions higher than ever before. In terms of their character, these have either been capital (i.e. Chandigarh, Bhubaneshwar, Gandhinagar) or industrial project cities (i.e. Bhilai, Rourkela, Bokaro) where the entire financial resources for planning and building them have come, directly or indirectly, from the State/Central Governments. The project costs of all such cities have been fairly large. An inevitable consequence of allocation of such order of financial resources has been denial of the same to some other competitive projects crossed out in deciding the priorities of allocation.

*This is preliminary report of my larger study "Land As A Resource for Planned Urban Development : A Case Study of New Bombay Experiment" currently in its final phase. As additional data come in, some of the conclusions reached here might possibly change.

For frank and quite often lively discussions, I am grateful to a large number of present and former CIDCO professionals and key officials of agencies which figure in the report. With the lone exception of Mr. JB D'Souza, I am leaving all others unspecified for reasons more than one.

The ICSSR, New Delhi funded the study and the Giri Institute of Development Studies, Lucknow where I am based, provided institutional support. Clearly these institutional and individual inputs have facilitated this piece. And yet, I am alone responsible for its contents.

At a time when the competing claims on the scarce public financial resources have increased, urban planners have mooted the idea of using land as a major financial resource for meeting the costs of planning and building new cities from a scratch. Whereas land has indeed been used as a resource by the private estate developers and even urban planning institutions such as the Delhi Development Authority (DDA) in the existing major Indian cities where the development costs are low, gestation period between land acquisition, development and realisation of market price relatively short,¹ the same has been experimented for the first time in case of a totally new city of two million population size in New Bombay by the City and Industrial Development of Maharashtra Ltd. (CIDCO), Bombay. Organised in eight sections, this piece analyses CIDCO's experience of planning, developing and administering New Bombay during 10 year period of 1970-80. It is based on the data obtained through investigative, unconventional techniques. The first section discusses the context and rationale of New Bombay's choice in preference to other options; the second recalls considerations leading to the use of land as a resource in New Bombay; the third presents initial structure of the area designated as New Bombay and its planned concept; the fourth reviews land acquisition and rehabilitation of the project affected population; the fifth recounts the sequencing^{of nodal} and areal development strategy employed in New Bombay; the sixth juxtaposes the rhetoric and working financial results of

¹These have essentially been exercises in part development of a city and never touched the gamut of issues involved in developing a complete whole and identity of total city.

operationalization of land as a resource; the seventh tentatively identifies factors responsible for non-realisation of self-sustained growth; and the final section deduces lessons which New Bombay offers in city planning.

I

The Choice of New Bombay

How the decision of developing New Bombay in preference to the (i) the Bombay Development Plan and Wilbur Smith Proposals and (ii) development of several satellite towns in the Bombay Metropolitan Region was itself made is a matter of considerable controversy and debate. I would first present the formalized official version as indicated by the documents of the CIDCO and state government and thereafter piece together the informal events and processes.

The New Bombay Draft Development Plan gives a chronology of evolution of New Bombay.² The chain of events started in March 1958 with the setting up of a Study Group on Greater Bombay under the chairmanship of S.G. Barve followed by July 1958 decision of the Bombay Municipal Corporation to prepare a Development Plan for the city. In February 1959 the Barve Group recommended a rail-cum-road bridge across the Thane Creek. In July 1964 the Development Plan for Greater Bombay favouring a further extended northward

²New Bombay : Draft Development Plan, (Bombay, CIDCO Ltd., 1973), 2-6.

development of the city³ at an estimated cost of Rs.700 crores (1964 prices) was prepared and submitted to the Government of Maharashtra. The proposals thereunder did not consider areas outside the jurisdiction of the Bombay Municipal Corporation. The state government did not accept them and, realizing the need to examine the metropolitan problems in the regional context, appointed a Committee in March 1965 under the chairmanship of D.R. Godgil to formulate broad principles of regional planning for the Bombay and Poona metropolitan regions. The Godgil Committee recommended regional planning legislation enabling creation of regional planning boards. In January 1967 the Maharashtra Regional and Town Planning Act, 1966 was passed and in July 1967 the Bombay Metropolitan Regional Planning Board (BMRPB) was constituted under the said Act. The BMRPB published its draft plan for the Bombay Metropolitan Region (BMR) in January 1970 and, among other things, recommended setting up of a 'metro-centre' (latter called New Bombay) on the mainland as a counter-magnet to the bulgeoning growth taking place in the southern most tip of Greater Bombay. The Maharashtra Government accepted this proposal and notified privately owned land in New Bombay for acquisition in February 1970 and established CIDCO Ltd., in March 1970 to act as a new town development authority (NTDA) for the New Bombay project.

The official version, thus, makes one believe that the idea of New Bombay was contained in a very vague form in the Barve

³Originally, the city was confined to the island. Its later day division into (i) city, (ii) sub-urbs, and (iii) extended sub-urbs has been result of northward extensions made in 1950, 1957, and 1965.

report and it was clearly delineated, and formalized by the BMRPB. This is, however, only part of the story. My discussions with a fairly larger number of actors involved in this decisional process reveal that an important informal group, representing urban planners, business, trade, and manufacturing interests having close links with important politicians and civil servants, organised, through discussions, seminars, conferences, media build-up, and high pressure lobbying, a very determined campaign in favour of twin-city proposal. Apart from the newspaper reportage, some documentary evidence of this effort is also available.⁴ Among these, an article written jointly by Charles Correa, Pravina Mehta, and Shirish Patel⁵ (called MARG piece hereafter) deserves a closer scrutiny for several reasons :

1. At a single place it establishes the fact that the idea of New Bombay on the mainland across the harbour and opposite Greater Bombay was developed as an alternative to the Master Plan prepared by the Bombay Municipal Corporation. The main thrust of the Master Plan, a handiwork mainly of the engineers, was on the extended northward development of Greater Bombay. In the debate which ensued on the relative merits of the Master Plan and the counter-magnet on the mainland, the other important issue of developing several satellite towns near Greater Bombay, referred to earlier by Barve Group and BMRPB, was really not given its due consideration.
2. It provides fascinating evidence of groundless reasoning justifying the case of New Bombay. Subsequent events have exposed the hallowness of these arguments.

⁴See, for example, Bombay, (Bombay, MARG Publications, 1967); Twin City for Bombay : Development Prospects and Problems, Report of a Seminar, (Bombay, Maharashtra Economic Development Council, 1970); and Bombay's Development and Master Plan : A 20 Year Perspective, (Bombay, Bombay Civic Trust, 1970).

⁵Charles M. Correa, Pravina M. Mehta and Shirish B. Patel, "Planning for Bombay", in Bombay, (Bombay, MARG Publications, 1967), 28-56.

3. It gives a step by step conceptual delineation of the vision of New Bombay in which the process part, indicating how one step initiated by the agency developing the counter-magnet would lead to a particular consequence, was kept systematically vague and entirely built on pious expectations. No convincing reasons were offered.
4. The document could be treated as some kind of a benchmark frame, from which it was possible to identify the alterations made in the basic vision and structure of New Bombay idea later on. In retrospect, it was then possible to gauge their significance in terms of consequences and motives.
5. The document was written by a trio which came to occupy crucial decision-making positions in CIDCO Ltd., and the formulation of the New Bombay Plan and its modifications.

The New Bombay thesis built in this document, starts with the argument that the future urban growth should necessarily create entirely new structural pattern (p.30); that existing towns and industries, the nuclei of new towns and industries would act as magnets to attract the population (p.31); and that to stop the flow of migrants to existing cities, counter-magnets are needed (p.31). Discussion of the alternatives was perfunctory mentioning only two : (a) to accept the existing centre of activity; or (b) create alternative centres of activity to serve as counter-magnet to draw the pressure away (p.33). The first was ruled out : the second was preferred for detailed analysis. Creation of a number of small satellite towns as a technique of redistribution of Greater Bombay's pressures was not favoured on the ground that (a) smaller ones would not serve that purpose,⁶ (b) they had to be

⁶That it was not so has been accepted by the Bombay Metropolitan Regional Development Authority (BMRDA), and it is actually working on a number of such plans in the entire Bombay Metropolitan Region (BMR).

sufficiently near, and (c) cost of several towns (of 10 lakh population) would be exorbitant (p.36).

The case of New Bombay on the mainland, directly opposite Bombay and of equal prestige and importance, was propped up on the hope that it would develop into as large as the older city; its very large size would provide the equilibrium necessary between old and new development (p.86). It was also argued that if growth still continued the new city could be further ringed later by new satellite towns located close enough to the centre so that its presence stimulated their growth (p.36). This was beautifully worked out argument. New Bombay was the solution for Bombay and satellite towns were not. When New Bombay became as big as Greater Bombay and faced similar problems, satellite towns would look after its problems!

Among other things, New Bombay was expected to stimulate growth in the entire region and act as a focal point for the development of satellite towns. How this would be so was not indicated. The idea was daft since in the first place Greater Bombay had not done so and in fact the piece itself argued of a conscious policy to ring them in case New Bombay faced Greater Bombay's problems. The main argument in favour of New Bombay was that it would exploit the magnetic pull of Greater Bombay because it was visually connected with Greater Bombay. No difference appeared to have been made between 'visual' and 'physical' connections. And this meant a lot in terms of circulatory problems involved.

After building a none too convincing case for New Bombay on solid grounds, the piece came to rely on existential justification for New Bombay. It argued that most of the decisions have already been taken by forces operating on this city. Significantly enough, it did not mention the role played by state promotional agencies such as the State Industrial and Investment Corporation Ltd. (SICOM) and Maharashtra Industrial Development Corporation Ltd. (MIDC) in very consciously increasing centralization first in industrial estates in northern Bombay, then in and around Thane, still later in the entire Thane-Belapur belt. Whereas the state government and all its agencies worked in a closely coordinated and concerted manner in siting and locating industrial units near Greater Bombay since the early fifties once there was not much scope left in the metropolis itself,⁷ the document stated that they were all working in an unrelated manner (p.41).

The discussion of the financial outlays involved in the implementation of Municipal Master Plan and the New Bombay idea was slanted and partisan. First, while the details of the former, then available, were given under itemized heads, the same were not worked out for the latter. Second, it was argued that the development costs for either location would be practically identical (p.48). This was something unbelievable since it is almost axiomatic that development costs at newer locations for same sized tasks are always

⁷For a fairly useful discussion on this theme, see, for instance, Nigel Harris, Economic Development, Cities and Planning: The Case of Bombay, (Bombay, Oxford University Press, 1978), and H.D. Kopardekar, "Metropolitan Growth and Social Change in India", in Selected Papers in Urban and Regional Planning, (Bombay, Bombay Regional Chapter; Institute of Town Planners, 1977), 25-37.

significantly higher. Cost estimates of only some of the nodal and city structure projects in New Bombay prepared later under the watchful eyes of these very people in CIDCO prove how off the mark their contention was. Third, only some of the additional costs involved in the latter case were indicated : there were some glaring omissions concealing the cost disadvantages of New Bombay's peculiar terrain, topography and climate. The Panvel creek bridge, constructed by CIDCO, alone has costed roughly Rs.2 crores. One has to wait to learn the staggering estimate of the damming of the Panvel creek. The trio can't possibly plead ignorance since the piece itself gave fairly useful information about the New Bombay site and maps which later come to be formalized by the state government and CIDCO. Fourth, it appears that even the selective additional costs given were gross under-estimates.⁸ Fifth, the cost of land acquisition under the Municipal Plan, put varyingly at 20 per cent to a quarter, was considered to be very high. It was expected to be 'much less' across the creek. Quite obviously, the propertied class in Greater Bombay was left to be untouched and not to be inconvenienced whereas the poor peasants and fishermen in New Bombay were cheaply dispensable. These calculations were, however, given a decisive blow by the organised resistance of the PWP in New Bombay later. Compensation already paid by CIDCO for 6398.07 ha. of land acquired bis Rs.6.39 crores and the total private project land that remains to be

⁸Prices have increased but not in the proportions as emerge from the comparison of MARG piece and present day costs. To give but one example, the Kurla-Karjat rail link then put at Rs.28 crores is now estimated to cost Rs.55.45crores only upto Panval.

acquired would alone cost about Rs.63 crores.

Having made a case for New Bombay on technical, and financial grounds, the document then systematically turns its critical attention on the Municipal Master Plan, the Wilbur Smith Report and other proposals which emanated from other sources. It felt that (i) the Municipal Master Plan would certainly do nothing toward future growth of Greater Bombay; (ii) the series of proposals would merely stretch the existing north-south pattern even further (p.49); (iii) the plan tended to escalate land values in the southern part of Greater Bombay even higher; (iv) population growth of Greater Bombay would continue; (v) it relied on density control which was difficult to achieve; and (vi) the proposal of second business centre at Mahim (known later as the Bandra-Kurla scheme) was not feasible because not much area was really available, and at best it could be only a secondary centre not really relieving the pressure on the one in the southern tip, and it would aggravate pressure on the north-south traffic flows (p.49). What the piece seemed to ignore was whether future growth of Greater Bombay was really a desirable planning goal? or whether a planning agency, while planning to ease existing problems of a metropolis, should, at the same time, also plan for further growth? Would its further growth not create additional problems? The Municipal Plan proposals might have stretched the north-south pattern. However, the essential issue at stake was not of pattern maintenance or structural change. The issue at stake was relieving of the felt pressures on the life and limb of Greater Bombay which the proposals were surely

attempting to solve. The escalation in land values of the southern part of Bombay island was being caused by the acute centralization of central functions there and not necessarily by the growth of the city. There was hardly any guarantee that population of Greater Bombay would cease to grow even if New Bombay was started. As it happened, Greater Bombay's population continued to leap frog in spite of New Bombay.

The document was harsh on the Wilbur Smith and metro rail proposals and, apart from bus and tube-railway, argued the case of monorail and fast ferry boats (p.53). It appeared that it was more concerned with the transport requirements of the stage where new and old Bombay were fully developed and was not very concerned about the current and interim traffic congestion. According to their own vision, the development of New Bombay was going to take considerable time. In the meanwhile, were the planners to leave Greater Bombay's circulatory problems an amused go by? There was hardly any choice but to implement them as is being done slowly now. And if substantial investment was being made in re-shaping vehicular traffic pattern of Greater Bombay, its extension northward was a cheaper alternative than development of New Bombay across the harbour.

Reading between the lines, the piece leaves one unmistakable impression : its authors were very keen that Greater Bombay's present economic structure was not brought under any telling pressure to spatially realign itself in the short run. By the time New Bombay had grown, it might be economically advantageous to shift.

In this mechanism, the initial cost of New Bombay's development would be borne by the initial population and the propertied class would move in for the kill when the going was good and on its own terms.

II

Considerations Leading to Use of Land as a Resource in New Bombay

Four major considerations eventually led the CIDCO Ltd. to use land as a resource in developing New Bombay :

1. One of the causes of routine non-execution of all ambitious town/city development/master plans in India has been their staggering financial size. The municipal agencies could never marshall such order of resources from their own efforts and the state and central governments did not sanction funds for them.⁹ The Governments had another reason in refusing the funds : this would have led to an avalanche of demands from a large number of similar cases. The Development Plan of the Bombay Municipal Corporation was not accepted by the Maharashtra Government because it was not in a position to earmark Rs.700 crores in one go. Therefore, it was hardly expected to sanction even a larger sized New Bombay project as and when it was prepared and submitted for its approval.

⁹Individual projects of some cities (i.e. Calcutta, Madras, Bombay) have been sanctioned, however. The state and central governments have also stood guaranties for major loans sanctioned by international agencies such as the World Bank to some municipal bodies (i.e. Bombay; World Bank loans for the water pipeline, BEST, etc.).

2. CIDCO's inner core group consisting of JB D'Souza (Managing Director until 1974), Charles Correa (Chief Consulting Architect), Shirish Patel (first Technical Advisor, then Director of Public Works) had previous career experiences which made them feel confident of making New Bombay a commercial proposition. Before taking over as the Managing Director of CIDCO Ltd., D'Souza had been, among other things, the General Manager of the BEST, Commissioner, Municipal Corporation of Greater Bombay, and Industries Commissioner, and, apart from being very articulate and conversant with the urban problems and their management, had a streak of the rare entrepreneurial qualities of abstracting, visualising, innovating and improvising in his working style. In the late fifties, when it was becoming increasingly difficult to find space for locating additional industrial units in Greater Bombay and the Government of Maharashtra was not willing to allot large funds to develop industrial estates near Greater Bombay, it was he who built the Wagle Industrial Estate in Thane at a cost of Rs.5 lakhs. Initially, there were no buyers and some plots, disposed in the early phase, were sold at very cheap rates. However, as the time passed there was great demand for the latter lot of plots and these fetched quite attractive prices.¹⁰ Overall, the estate generated additional funds for the MIDC demonstrating in the process the self-sustaining capacity of such ventures. Charles Correa, the celebrated architect had, among his many consultancy assignments, assisted the Delhi

¹⁰ Based on in depth discussion with JB D'Souza held on 21 April 1981 at the Administrative Staff College of India, Hyderabad.

Development Authority in designing, developing and marketing many a commercial complex in Delhi and eventually help evolution of a very good financial reserve with the DDA. The DDA experiment had evoked a high critical acclaim from the CIDCO's Planning Team. Similarly, Shirish Patel, an engineering consultant and planner, had helped many an estate developer in Greater Bombay to turn an ugly patch of uneconomic land into a vestibule of goldmine. While shaping of policy inside CIDCO was in the hands of these people, its Planning Team, constituted to act as the think tank and consisting of well known names in their respective fields, tended to reinforce their viewpoint on this issue.

3. A large industrial complex had grown in the Thane-Belapur area, forming part of New Bombay and sooner or later the port of Nhava-Sheva was going to be sanctioned by the Planning Commission. Some important central agencies were moving in the area. Whereas considerable amount of infrastructural facilities had already been built in the area, the major land users in future, according to one viewpoint, were expected to develop their chunks of lands and thus, share the development cost of the city. Major industrial groups (i.e. the Tata, Walchand, Mafatlal) having a larger stake in the area also exerted considerable pressure on the then Maharashtra Chief Minister, Mr. VP Naik giving indications that their employees were expected to buy a large number of housing units in New Bombay.

4. Comparative cost estimates of Bombay Master Plan and New Bombay were, as seen earlier, presented to the Maharashtra Government in such a fashion as to give an impression that New Bombay

had tremendous advantages. The kingpin of this line of reasoning was expected cheap availability of land in New Bombay. The Government was persuaded to believe that all that was needed was a reasonable sized loan to the new town development authority (i.e. CIDCO Ltd.) which would be eventually returned back once the NTDA, using land as a resource, developed its own revolving fund. Without spending a very large sum of scarce state resources, the Bombay metropolitan region would stand to benefit tremendously because of development of both the cities.

III

New Bombay : The Bench Mark and Planned Concept

The formal recommendation of the BMRPB to develop a twin city across the harbour was accepted by the Government of Maharashtra. The CIDCO Ltd. was incorporated as a limited company controlled by the State Government in March 1970. It was designated as the New Town Development Authority (NTDA) for New Bombay project in March 1971, and charged with the task of (a) planning, (b) implementation, (c) administration, and (d) maintenance of New Bombay and any other areas which may be entrusted to it by the Government.

The total notified area of New Bombay is 344.80 Km.² This consists of 95 villages from Thane and Kulaba districts. 29 of these villages lie in Thane Tehsil in Thane District and 28 each in Panvel and Uran Tehsils of Kulaba district. A total of 24878 families were living in the project area at the time of notification. About 98.76 Km.² (28.6 per cent) of the project area although lying

within its boundaries was not to be acquired as this consisted of (a) municipal land (55.96 Km.^2 or 16.2 per cent), (b) MIDC, MSEB and Defence Department land (42.21 Km.^2 or 12.2 per cent), and (c) miscellaneous land like Gaothan (0.59 Km.^2 or 0.2 per cent). Total land slated to be acquired for the project amounted to 29424 ha. This consisted of three distinct categories : (a) Government land : 10137 ha. (34.5 per cent), (b) Salt pan land of the lessees and licensees : 2720 ha. (9.2 per cent), and (c) private agricultural land : 16567 ha. (56.3 per cent).

Another feature of existing physical structure of New Bombay was quite sizeable area of non-usable land. It was 4321.06 ha. or 14.7 per cent of the total land to be acquired. This consisted of (a) green zone (47.62 ha.), (b) Khajan or low lying land (2005 ha.), (c) forest (1508.45 ha.), and (d) scattered pieces (759.99 ha.).

Both natural features and administrative boundaries determine the boundaries of New Bombay. The Thane creek is on the western side : Parsik hills govern the eastern boundary in the northern portion; in the middle section the eastern boundary is co-terminus with the administrative boundaries of some of the villages between Taloja and Panvel along the foot of Adai hills. On the southern side the boundary coincides with the southern limit of village Kalundre and then runs in a south-westerly direction upto village Change along the Karanja creek, leaving the Karnala hills range outside the project area. The confluence of Thane, Karanja and Dharamtar creeks makes the south-western segment. Most of the area along the western boundary is low lying land and covered by

high tide. Quite a few salt pans are located here.

Some of the peaks of the Parsik hill rise to a height of 235 meters and above and have steep slopes on the sides in between the height of 20 and 200 meters. The middle portion of New Bombay is an area dotted with a number of small hills and some parts of the hills even rise to the height of 100 meters and above, the highest peak being 133 meters. Mora and Dronagiri hills are two other steeply rising hills in the south-west segment.

The islands of Nhava-Sheva, where the new port is to come up, are separated from the other portion of the project area by low lying land. A creek deep enough for berthing large ships, separates the two islands. Most of the areas in the southern part of Thane-Belapur belt along the creek side and the area to the east of Sheva and Uran upto the firm land on the south-east and also to the east of Karanja along the Karanja creek are being used as salt pans.

The Panvel creek, on which a major bridge has already been built and opened for traffic, is in the heart region. It surrounds the Waghivali island which is mostly covered at high tide; a number of small inlets enter further inside towards Taloja on the north, Kamothe on the east, Panvel on the south-east and Dapoli on the south. Kamothe is surrounded by such small creeks on three sides. Large portions of Kharghar, Kolhekhar, Navade Khar, and Pendhar villages are covered by low areas along the creek. Kalundari and Gadhi rivers join the Panvel creek on the southern side of Panvel

town. The entire New Bombay area is Deccan lava country and abounds in rock outcrops throughout.

The foregoing features of New Bombay's terrain in combination with the gaseous emission discharged locally by the chemical industries located in the Thane-Belapur Road and the Taloja estates of the MIDC on the one hand and airborne pollutants brought from the Sion-Trombay-Chembur areas of Greater Bombay by a particular wind pattern on the other were causing air and water pollution at the time of notification. Consequently, creation of liveable environment in New Bombay was likely to be a costly, cumbersome and, at times, quite painful endeavour¹¹ and put a brake on efforts to establish large sized manufacturing units. Per unit cost of development of land was surely going to increase making the task of marketing it a formidable proposition.

4575

The Barve Group had anticipated a spillover of industries from Greater Bombay once the Thane creek bridge, suggested by it, was ready. Actually the spillover of the industries had, however, come about in New Bombay much earlier than the bridge : only geographically it had started from Thane and then proceeded toward south on the Thane-Belapur road and Taloja estates. The MARG piece had assigned it, as seen earlier, a much larger real and imaginary role. When the Government of Maharashtra formally baptised New Bombay, it set the following objectives for the CIDCO and the project :

¹¹CIDCO planners were certainly aware of this as their New Bombay Draft Plan (Sections 3.01 - 3.18) indicated.

1. to reduce the growth of population in Greater Bombay by creating an attractive urban area on the mainland across the harbour which will (a) absorb immigrants who could otherwise come to Bombay; and (b) attract some of Bombay's present population.
2. to support state-wide location policies which will lead eventually to an efficient and rational distribution of industries over the state and to a balanced development of urban centres in the hinterland.
3. to provide physical and social services which raise living standards and reduce disparities in the amenities available to the different sections of the population.
4. to provide an environment which permits the citizens in New Bombay to live fuller and richer lives free, in so far as this is possible, of the physical and social tensions which are associated with urban living.
5. to provide training and all possible facilities to the existing local population in the project area to enable them to adapt to the new urban setting and to participate fully and actively in the economic and social life of the new city.

This was quite a tall order for an agency which was only designated as the NTDA : it had no independent powers of its own and very limited resources at its command. As the project approached concretized formulation stage, CIDCO and the state government began experiencing problems. In an attempt to chart out a wider industrial policy for the entire state of Maharashtra, CIDCO commissioned and completed a major study. The state government, however, did not commit itself to follow the suggested policy just as it had exercised its discretion not to put the three conditions set by the MARG piece ((i) creation of state capital, (ii) movement of government offices, and (iii) establishment of a single coordinating agency whose directions would have to be followed by all organisations working in the area) for the success of New Bombay.

Different CIDCO and state government documents began the painful exercise of dilution of these objectives with varying listings. The fifth objective was altogether deleted ever since the CIDCO reached a political settlement with the leaders of project affected people in 1979 enhancing the quantum of compensation for the land acquired (to Rs.15000 per ha.) and dispensing with the rehabilitation measures.

The Multi Sector Report,¹² brought out in 1980, however, drastically - perhaps more realistically - recasted and redefined the objectives of New Bombay and the CIDCO. The objective of New Bombay now was to contribute to (i) deconcentration of south Bombay; (ii) reduction in the cost of supporting infrastructure which otherwise would entail if the present trend continued unabated; (iii) siphoning off industrial growth to the mainland specially in those branches which have proven to be advantageous in New Bombay (including port based industries, service industries and industries based on the associated gas of Bombay High); (iv) provision of better infrastructure in New Bombay; and (v) dispensing with long distance commutation - and thereby costly investments in transport infrastructure - by better planning concept. The CIDCO's role, similarly underwent a sea-change. Its catalyst role was now limited to developing the base for attracting private investment opportunities as well as indicating the need for complementary public investments

¹²Multi Sector Urban Development Projects for New Bombay, (Bombay, CIDCO Ltd., 1980), 1-2.

by other agencies'. From the lofty 'support of state-wise industrial location policy' it now came down to 'promote and regulate the growth of industrial and commercial activities in New Bombay keeping in view the environmental, transport and communication requirements and the overall advantageous position' of the new city.

The MARG piece had specified six stages in the development of New Bombay. These were : state 1 : building of the Thane creek bridge for stimulating early development; stage 2 : building of early development area just near the bridge (Vashi); stage 3 : industrial development along the road connecting it to Thane with the early development area providing an encouragement to this process; stage 4 : building of the business centre and damming of the Panvel creek; stage 5 : construction of docks near the business centre further pepping up its growth; and stage 6 : construction of new bridges, development of Wadala and Trombay areas to facilitate greater inter-action between old and new Bombay (pp.42-43). Development along these lines was expected to change the movement pattern in the enlarged twin city where the sea would become part of journeying life of its citizens and the east-west traffic corridor would gain prominence¹³ (p.44).

¹³This is one of the many myths built. A closer look at the map yields the conclusion that it is not exactly the case in New Bombay when the two cities developed. New Bombay too would have a predominantly north-south traffic pattern. Naturally, with the face to face existence of Greater and New Bombay the traffic between the two would be assuming predominantly east-west pattern. This could have been different if New Bombay was not sited the way it was.

The development strategy outlined by the approved New Bombay plan is substantially following the MARG piece lay out. The New Bombay city structure plan is a series of nodal settlements strung along a mass rapid transit (MRT) line. The spread of a node is decided by the walking distance considered reasonable from MRT stop and the total estimated populations by such considerations like scale economies determining the threshold size. On this basis, each node is expected to eventually have about one lakh population. New Bombay is expected to contain 20 such nodes in its ultimate development stage. The central business district (CBD) located in the heart around Belapur will be multi-nucleated.

Each residential node is again organised as a series of sectors of approximately 5000 population, generally self-contained in terms of social facilities and a reasonable distance from the bus stop. The pedestrian environment is achieved by linking various social elements like schools, hospitals, primary health centres, shopping, parks, and playgrounds to a cluster of houses by pedestrian spines segregated from roads serving the vehicular traffic. The New Bombay plan provides for MRT systems which have been planned through the centroids of various residential and employment nodes. The bus system would initially act as the public transportation system to be replaced eventually by a railway system.

To cater to the travel demand, initially for giving quick access to the proposed metro-centre and thereby induce growth in the area and later for ensuring the benefits arising out of economy of

agglomeration of activities in the region two rail links between the two cities are planned. One would connect Mankhurd to Panvel across the Thane creek via the new CBD at Belapur : the other would link Kalwa with Turbhe.

IV

Land Acquisition and Rehabilitation : Magnitude and Response

The New Bombay Development Plan had a twenty year (1971-1991) perspective within which the CIDCO as NTDA had to develop 20 nodes where two million population had to live and a close interactional relationship between New and Greater Bombay had to emerge. Some of its areas, as indicated earlier, were already functioning as work nodes : certain others were primarily earmarked, under the proposed land use plan, for the bulk land using institutions which were to undertake specialized development activity relatively independent of the CIDCO's schedule of activities. The CIDCO task, however, involved exercise of certain options in acquiring, developing, and disposing land throughout the length and breadth of the project area in such a fashion as to achieve the specific nodal and city structure goals and priorities. Given unlimited resources, it would have been open to acquire the entire project notified land at the earliest possible opportunity since this would have been convenient, cheaper and ideal for subsequent planning, use and disposal. The CIDCO, however, had very limited resources to begin with : in addition it was committed to develop a self-sustaining capacity financially using land as a resource.

A third complication was that land acquisition was a very slow, zig-zag and expensive process. Project affected people are not necessarily very keen to be dispossessed of their land : in this case the area was a stronghold of the Peasants and Workers Party (PWP) with a very militant leadership. The PWP not only opposed land acquisition : it was totally against the very concept and visualization of the New Bombay project. This opposition was fanned from outside by two important set of forces. One such force consisted of powerful leaders of the ruling Congress party from Thane and Kulaba districts some of whom occupied crucial government and party positions. This force had large areas of Benami lands in the New Bombay area and had a vested interest in delaying acquisition of land since delay almost always meant payment of compensation at enhanced rates.¹⁴ The second set consisted of planners, academicians, journalists, political leaders and public men based in Greater Bombay. It considered development of New Bombay a wrong methodological solution to the problems primarily created by acute centralisation of manufacturing, trade and commercial activities in the BMR. The project affected people of New Bombay expressed their opposition in varied forms ranging from simple arguments to court cases to physical assault of the CIDCO officials and dumping of construction equipment and materials into the Panvel creek. In the initial period (1970-1972), the CIDCO had to deploy a large police

¹⁴One motive force active in the interest of both opposition and ruling parties was a spate of elections held. Between 1970-1980, elections to the assembly, Parliament, Zilla Parishad, and Gram Panchayat have been held in the area apart from some mid-term ones.

contingent in the more volatile areas (i.e. Belapur) to prevent the situation from getting out of hand. Inevitably, this opposition caused enormous delay in the acquisition process.

A fourth factor was the inter-locutory nature of the twin processes of land acquisition and rehabilitation of the project affected people. The CIDCO was committed to spend five per cent of project budget on an elaborately worked out package of rehabilitation programmes. Acquisition of larger chunks of private agricultural land and salt pans not only involved payment of compensation¹⁵: it also involved expenses in rehabilitating the affected people. One theoretical option was to concentrate on government lands. However, in reality this could not be practised due to two major considerations : (i) single categories of lands were not sited in large enough chunks to be sufficient to develop a node; and (ii) it was necessary to acquire land at different places in the project area to facilitate movement of other agencies into the area and to start work on projects of vital nature to the city structure as against nodal requirements. Because of the foregoing, the CIDCO was forced to adopt an ad hoc approach to the land acquisition issue in an effort to ensure better pursuit of project goals for a considerable period. This policy ambivalence reflected itself in the turbulence negotiation strategies worked out and employed by

¹⁵ Actually, even the acquisition of government land was also not free. Only the per unit cost was lower and the process itself was somewhat easier and tension-free.

different Managing Directors.¹⁶ It is only in the beginning of 1980 - a full ten years after the launching of the project - that the policy has become definitive in terms of acquisition, quantum needed for use during the next 10 years, and the residual to be denotified. The 'take off' stage seems to have materialized where unfavourable forces appear to be now reversing their positions. The project affected people have, for instance, accepted the quantum of compensation and the inevitability of the project; the reluctant trade and commercial interests (i.e. agricultural produce, iron and steel, etc.) are willing to purchase plots, shops, housing in New Bombay : Nhava-Sheva port idea has been approved in principle; a land outside the nodes is being bought by major land users to yield large enough funds for the CIDCO to undertake an accelerated programme of New Bombay's development.¹⁷

¹⁶These could be grouped as followed : (1) D'Souza : carrot and stick strategy of firmness with a comprehensive rehabilitation package; (2) Nayak : political strategy of winning over the hard core at select places through intensive personal contacts and intermediary interventions; (3) Salvi : uncashing ritual affinity with enhanced rate of compensation; (4) Chawle : higher rates of compensation at the expense of the entire range of rehabilitation programmes; (5) Gupta : linking up land acquisition with land use and denotification of land not needed during the next 10 years.

¹⁷The telling effects of Greater Bombay's 8.2 million present population on quality of urban life have also begun to sink on crucial decisions makers.

Table 1 : Notified Lands and Their Acquisition in New Bombay as on 31 August 1980

Particulars	Area (in Ha.)			
	Thane	Panvel	Uran	Total
<u>Land Notified</u>				
1. Government land	4599	3853	1685	10137
2. Private agricultural land	2214	9666	4688	16567
3. Salt pan land	878	14	1828	2720
Total	7691	13532	8201	29424
<u>Land Acquired</u>				
1. Government land	3057.68	857.97	85.39	4001.04
2. Private agricultural land				
2.1 By urgency clause	0.18	30.85	183.04	214.07
2.2 By declaration of awards	658.33	850.50	-	1508.82
2.3 By voluntary surrender	55.60	607.45	11.08	674.14
Sub-Total (2)	714.10	1488.81	194.12	2397.03
Total	3771.78	2346.78	279.51	6398.07

Source : CIDCO Ltd., Bombay and New Bombay.

Table 2 : Land Utilized by CIDCO as on 31 August 1980

Particulars	Area (in Ha.)			
	Thane	Panvel	Uran	Total
<u>Land Utilized so Far</u>				
1. Private land	344.05	344.01	170.08	848.09
2. Government land	480.02	22.65	12.28	514.95
Total	824.07	356.66	182.31	1363.04
<u>Land Likely to be Utilised in Near Future</u>				
1. Private land	240.99	292.03	-	533.02
2. Government land	180.53	0.20	0.22	180.95
Total	421.52	292.23	0.22	713.97
<u>Area Proposed to be Used Within Next Ten Years (inclusive of land already acquired)</u>				
1. Area (Ha.)	227	4037	4149	10460
2. Number of villages	25	22	20	67
<u>Area Proposed for Denotifi- cation Being not Required Within Next Ten Years</u>				
1. Area (Ha.)	815	5645	4149	10609
2. Number of villages	21	34	23	78

Source : CIDCO Ltd., Bombay and New Bombay.

Table 3 : Land Acquisition and Use Ratios

Particulars	Percentage
1. Total agricultural land as percentage of total project land	56.3
2. Total land acquired as percentage of total project land	21.7
3. Total government land acquired as percentage of total government land	39.5
4. Total private land acquired as percentage of total private land	14.5
5. Private land utilized as percentage of private land acquired	35.4
6. Government land utilized as percentage of government land acquired	12.9
7. Total land utilized as percentage of total land acquired	21.3
8. Area proposed for development in next ten years	35.5
9. Land proposed to be denotified as percentage of total project land	36.1

Table 4 : Rehabilitation Task as on 31 August 1980

Particulars	Thane	Panvel	Uran	Total
1. Families affected	8037	9817	7024	24878
2. Families from whom land actually acquired	1843	1457	857	4157
3. Families (out of 2 above) allowed to cultivate	809	857	13	1679
4. Families whose land submerged	3	302	-	305
5. Families dispossessed actually				
a) Partly	750	180	752	1692
b) Wholly	281	108	92	481
6. Rehabilitation not required for families dispossessed				
a) Already in service	178	39	241	458
b) Engaged in business	251	42	38	331
c) Residing outside project area	174	19	77	270
d) Old age	22	-	3	25
7. Remaining families to whom benefits need to be given	406	198	485	1089
8. Families (from 7 above) to whom benefits given				
a) Placement	297	106	308	711
b) Training	33	27	44	104
c) Other benefits	13	1	10	24
9. Families to whom benefits need to be given	63	64	123	250

Source : CIDCO Ltd., Bombay and New Bombay.

Table 5 : Progress of Rehabilitation Schemes as on
31 August 1980

Particulars	Thane	Panvel	Uran	Total
1. Boys trained				
a) CIDCO TTCs	613	669	821	2203
b) Through other agencies	59	511	194	764
2. Placement				
a) Ist category jobs				711
b) II, III and IV category jobs				2814
Total				3527
3. Placement areas				
a) Within New Bombay	1109	867	773	2749
b) Outside project area	95	318	365	778
Total	1204	1185	1138	3527
4. Shop loans scheme				
a) Persons	6	39	42	87
b) Amount (Rs.)	11400	56300	56850	124600
5. Social amenities (road, water supply, community centre, latrines, cattle ground, washing plate, bus stand, T.V. set) (Rs. lakhs spent)	8.56	1.78	2.90	13.24
6. Primary education (grants-in-aid : Rs. lakhs)	2.57	3.90	2.80	9.27
7. Secondary education (expenditure in Rs. lakhs)	0.97	0.52	1.70	3.19
8. College education (expenditure in Rs. lakhs)	0.94	15.29	5.44	21.67
9. Health and nutrition scheme (in Rs. lakhs)	-	-	-	1.02

Source : CIDCO Ltd., Bombay and New Bombay.

Table 6 : Expenses on Land Compensation and Rehabilitation
(As on 31 August 1980)

1. Total amount paid as compensation : Rs.6.39 crores	
2. Rate sanctioned	
a) Non-agricultural rates	: from Rs.1 to 12 per M ² in Thane and Panvel
b) Agricultural rates	: from Rs.1000 to 7500 per acre in Panvel and Uran
c) Ex-gratia	: to make up the total amount at the rate of Rs.15000 per acre
3. Rehabilitation expenses incurred (Rs. Lakhs)	
a) Salaries of staff in rehabilitation section	23.85
b) Salaries of training staff	25.28
c) Rehabilitation schemes	114.07
Total	<hr/> 163.20

Source : CIDCO Ltd., Bombay and New Bombay.

Data contained in Tables 1 to 6 give some indication of the magnitude of the task spread in land acquisition and rehabilitation and the extent of progress made by the CIDCO. On their face value some of the figures such as the percentage of project land acquired (about 22), percentage of acquired land used (about 21) and percentage of project land expected to be denotified (about 36) tend to give a very misleading picture of the tasks accomplished. However, these should be juxtaposed with matching figures such as percentage of private land in the project area (about 56 : to reveal the fierceness of opposition and obstacles put in land acquisition), amount of compensation paid (Rs.6.39 crores), rate of per acre compensation (pegged at Rs.15000 per acre since 1979), comprehensive range of rehabilitation programmes undertaken (training, placement, loans, health and educational programmes, etc.) and amount spent on rehabilitation (Rs.1.63 crores) to correct this distortion. To this should also be added the consideration that projects of this nature have a long gestation period where in the initial period quite large parts of capital become locked forcing a slow down of the tempo of project activities.

V

Sequencing Nodal and Areal Development

Attracting such migrants as would have otherwise gone to Greater Bombay and diversion of selected activities from there to decongest it involved creation of such an identity for New Bombay which would operate both the push and pull factors. The CIDCO was

not in a position to decisively influence the forces controlling these two. In addition, all the 20 planned nodes and areas outside them could not be, financial and other institutional capacity-wise, developed in one sweep. Consequently, the CIDCO had to evolve a strategy of sequential development of residential and work nodes and areas outside them facilitating differential flows, in and out, to different directions within BMR and beyond. Impeded as it was, evolution of the strategy became an outright gamble, one totally dependent upon the nature and extent of support it received from the central and state governments, their key agencies, the manufacturing, trade and commercial interests, and the existing and potential population. This strategy assumed that support would be forthcoming. As would be evident a trifle later, many of these expectations went hay-wire affecting the fortunes of the project in a significant fashion.

The evolved initial strategy consisted of development of a residential node at Vashi, an agricultural produce market (APM) node nearby at Turbhe, a CBD at Belapur, an extended residential node near Panvel, the development of the Nhava-Sheva port, and development of vital physical infrastructure necessary for the minimal operation of the city structure. Siting of each node had a specific logic in the CIDCO's view. For example, Vashi, located just across the Thane creek bridge connecting the old and new cities, was expected to be a residential complex where the existing workers in the organised sector industries at Thane-Belapur road would live. The APM was meant to accommodate the diverted vegetable

and fruit markets then bursting at their seams in south Bombay. New Panvel was to cater housing needs of the persons working in the units of Panvel-Taloja industrial estate. The CBD at Belapur was to divert the bulgeoning growth of the tertiary sector in the Backbay Reclamation at Nariman Point. The Nhava-Sheva port was expected to relieve pressure on the overworked Bombay harbour. This was minimum package. And yet, its magnitude was staggering. The CIDCO had to phase it and, in some cases, farm out segments to concerned agencies. It is essential to note the progress made on each of these projects during the last 10 years.

Vashi node covers an area of 586 ha. Its first phase consists of eight sectors. To date about 112 ha. have been reclaimed on which 3078 houses have been constructed and occupied. Another 2487 houses are nearing completion. A number of developed plots have been sold to the individuals and cooperative societies. The present population of Vashi is about 36000. The node has two major schools, and a 80 bed hospital functional. Additional supportive social infrastructure, and civic amenities are also available. A district business centre is likely to come up during the second phase of its development which the CIDCO is hoping to complete by 1982. The CIDCO has not only developed the area using the Dutch method of reclamation¹⁸ and constructed housing here : it also initially built the

¹⁸The area is below mean sea level and in the absence of protective dyke could get submerged at high tides. One requirement is to have high pressure pumps to flush out all liquids into the Thane creek.

two media school and 80 bed hospital and administered them before marketing them to well-established voluntary agencies to recover their costs. The node has been an exasperating and exhilarating experience to the CIDCO at different points of time. The exasperation involved in developing almost every single item in this node - from land to social infrastructure and civic amenities - and administer them. When it came to recover its costs by marketing housing in March 1973, the CIDCO found to its horror that the targetted group¹⁹ was not in a position to buy the offered 842 housing units.²⁰ The industrial units in the Thane-Belapur area backed out of their promise to buy these and the LIC's Own Your Apartment Scheme, expected to provide loans to the buyers, did not materialize. In spite of frantic efforts, considerable number of housing units remained unsold. Ultimately, the CIDCO's second Managing Director, in an effort to improve organisation's liquidity and bail it out of its self-inflicted economic morass, sold them to institutions like Bhabha Atomic Research Centre (BARC). Subsequent exercises in marketing housing and other land uses have fared relatively better. Now the node is at a point in its development that marketing does not appear to be a problem.

¹⁹This target group consisted of 6 categories : A=employees of existing industrial units in Trans Thane industrial estate of the MIDC who had applied in 1972; B=similar employees who had not applied; C=employees working in the APM organised by Maharashtra Agricultural Development and Fertilizer Promotion Corporation Ltd. (MAFCO); D=employees of units about to be located in the MIDC area or APM; E=employees of the CIDCO; F=employees of the MAFCO.

²⁰This was one of the many issues on which the CIDCO had tremendously studied information, competent professional advice and even advance warning. Two of its then nine existing task forces had forcefully argued that in the absence of any easy hire-purchase arrangement the expected target group can't purchase the housing. The CIDCO's capital would consequently be locked. One such note was titled "CIDCO Goes Red".

The APM at Turbhe was a node intended to be closely linked with the CIDCO's efforts to relocate to New Bombay agricultural produce markets presently in south Bombay. It is a huge 115 ha. area to be developed in several stages. Part of its area was given by the CIDCO to its sister institution, the MAFCO in 1972 to construct its cold storage and warehousing facilities. The CIDCO itself has constructed the remaining part, totalling about 15 ha. at a cost of Rs.3 crores. Cold storage capacity of 12000 tonnes has been created; shops, godowns, a truck terminal, housing, and servicing space have been built; a railway siding linking Kalwa on the Central Railway to Turbhe is on the anvil. The CIDCO's relocation plan has, however, met with stiff resistance from the wholesale traders in agricultural commodities. After its informal efforts to persuade them had drawn a blank, it persuaded the Government of Maharashtra to invoke appropriate provisions of the Maharashtra Agricultural Produce Markets Act to derecognize present such wholesale markets in Fort, Duncan Road, Byculla, etc. to force them to move to APM in New Bombay. The traders carried the issue from the lowest to highest courts and finally lost it. They then resumed their dialogue with the CIDCO and agreed to shift. But by August 1980, only the onion and potato markets have shifted, however. In mid 1980, when the new government took office the wholesale traders lobbied with it involving among others the BMRDA. The Maharashtra Government decided in 1980 that all the vegetable wholesale markets can not be shifted to New Bombay since the overwhelming quantum of perishable items are consumed in Greater Bombay and preferred their relocation to Bandra-Kurla commercial centre being developed by the

BMRDA.²¹ The wholesale trade itself has now come to realize that sooner or later it has to shift and New Bombay offers better choice and opportunities than Bandra-Kurla, and has approached the CIDCO to give housing to them close to the APM apart from plots, shops, godowns, etc. in the APM. Presently, the CIDCO is in the process of developing a 34 ha. complex for the sugar, jaggery, spices, oil and oilseeds, fruits and poultry trade and 'expects to shift' roughly 20000 jobs and 1.2 million tones of annual traffic to New Bombay.

The CBD at Belapur has not gone very far so far. Its first phase was expected to develop 347 ha. where the office complexes had to come up. Todate, only a solitary government complex, the Konkan Bhuvan, with an employee strength of 1300 is functional, although housing accommodation and other social facilities have been provided in the area. Plots for office complex for the banks, insurance and private companies have been earmarked with the liberal FSI of two. The volunatary response from the tertiary sector has been dismal. It is here that the decisive role had to be played by the Maharashtra Government. It was morally committed to shift critical central functions to arrest Bombay's growth and help re-location efforts of the CIDCO. Successive governments - Naik, Chavan, Patil, Pawar - have, however, actively promoted the Backbay project. The building of the Assembly complex at Nariman Point has,

²¹An important BMRDA official indicated that the Government's decision had the BMRDA backing. The CIDCO had obviously collided head on with the very agency responsible for regulating development of the BMR.

in fact, only emboldened the private estate sharks. Upto July 1981, the Antulay government have shown very confusing posture on this question. On the one hand, it appears to be moving toward building the Gateway - Uran bridge (which Mrs. Gandhi too had prohibited) by persuading JRD Tata to head an autonomous corporation to conceive and construct it. This would contribute significantly in turning New Bombay into a dormitory town and give further impetus to the Backbay concentration. On the other hand, it has announced its "intention" to (i) shift its offices including Mantranalaya across the harbour, and (ii) regulate the flow of migrants into Greater Bombay (by introducing work permit system possibly) and executed a ruthless demolition operation of pavement dwellers in the midst of a raging monsoon. While the hapless pavement dwellers are groaning in stunned silence, no commensurate punitive steps are being thought of to force the private manufacturing, trade, business, office sectors to move out of Greater Bombay.

The CIDCO had decided that development of 400 ha. New Panvel node would be attempted largely through private efforts. As such, it offered 1000 developed plots to the public which were promptly snapped up by the estate developers and property speculators. Not much of expected development has materialized so far although over six years have elapsed thereafter. Spurred by the belated response of the wholesale traders, however, the CIDCO is now developing a 250 ha. Kalamboli warehousing-cum-marketing complex close to the New Panvel for the iron and steel trade at a cost of Rs.5 crores. This would enable shifting of iron and steel stock yard and market

presently located at Darukhana and Carnac Bundar respectively resulting in diversion of 15000 jobs and 2 million tonnes annual traffic.' 1500 plots have already been purchased by the Iron and Steel Merchants' Association. Offices of TISCO, IISCO and SAIL are to be located there.

The Nhava-Sheva port project was mooted in 1958 and was one of the major considerations for planning the city of New Bombay. However, as a critical gleaning of relevant papers concerning this project and my discussions with the officials of Bombay Port Trust (BPT), Maharashtra Government, the Ministry of Shipping and Transport, the Planning Commission, and the shipping trade indicates, it was caught in the war of attrition going on between the Ministry of Shipping and Transport and the Planning Commission on the one hand and the BPT and Gujarati shipping interests lobby propelled and run by multinationals interested in marketing sophisticated port handling technology on the other. Twenty two years and three Expert Groups later, the Planning Commission could accord 'in principle' sanction to the project in May 1980 and ask for a detailed project report. In the meanwhile, the 500 year old Bombay harbour, with a limited draft and consequently limited capacity to handle large sized ships, has been forced to operate at 90 per cent of capacity utilization (as against recommended 60-70). Desilting operations have almost been totally disrupted. Congestion at the port has reached such proportions where ships have to wait for 40-50 days mid-stream. Between 1962-63 and 1977-78 the shipping lines suffered a dead a/loss of Rs.79.71 crores, (its present value reckoned at Rs.128.22 crores) on this account. Some shipping lines are now boycotting

the port. The cost of building Nhava-Sheva, originally estimated to be Rs.58 crores, has now soared to, depending upon the proposed berthing capacity and level of technology to be used, figures ranging between Rs.200 to Rs.300 crores.

While the Planning Commission and other agencies were busy in deliberating the issue, oil and natural gas was struck in Bombay High first and Bassein shelf still later in the early seventies. The Oil and Natural Gas Commission (ONGC) required substantial shore facilities to commercially exploit these finds. It approached the CIDCO Ltd. for allotment of land on Nhava island. Since the port of Nhava-Sheva needed both the islands for port and port based industries, the CIDCO was not inclined to accept their request. However, the state government "persuaded" it to allot 200 acres on the Nhava island. Now the ONGC is demanding additional 200 acres land there whereas the BPT, promoters of Nhava-Sheva port, are fighting a battle with the CIDCO, the Ministry of Petroleum and Chemicals, and Maharashtra Government arguing against it fearing mortal damage to their port project. Further trouble has been caused by environmentalist group which wants parts of these islands as a green belt region. In response to their high-pressure campaign, the Prime Minister has already directed that areas around the proposed port should not have parasite industries and when the detailed project report (DPR) of Nhava-Sehva goes to the Planning Commission for appraisal, the latter should scrutinize to see that it would significantly decongest Bombay port.

During the first 10 years, the CIDCO's nodal and area develop-

ment strategy in New Bombay was using the existing industrial base points (with the solitary exception of CBD Belapur) as props. Its annual average expenditure on the project was Rs.4.16 crores. By January 1980, the CIDCO itself had come to the realistic conclusion that its tempo of development work in New Bombay was just not sufficient : it had to be considerably pepped up. Keeping the changed context in view, therefore, it prepared its 1980-85 five year strategy with an estimated outlay of Rs.399.90 crores. This strategy involved development of four new nodes (Airoli near Thane, Nerul between Turbhe and Belapur, Kalambali near Panvel, and Uran near existing town of Uran) and expansion of existing nodes at Vashi, APM, and CBD Belapur. In addition it also included the two rail links (Mankhurd - Panvel, Kalwa - Turbhe), inter and intra-city bus system, the Nhava-Sheva port and port based industries. It was a strategy similar to the one followed earlier excepting for an increase in the order of investment to be made per year.

VI

The Rhetoric and Realization of Self-Sustained City Development

As I have already indicated, one reason why the Maharashtra Government agreed to develop New Bombay in preference to the Bombay Development Plan proposals was the expected ability of the NTDA to use land as a resource making city development a commercial and self-sustained proposition. The general idea was to acquire land at cheap rates, develop it, sell at a profit and generate surplus

to make a revolving fund. This was also the reason why this task was entrusted to the CIDCO Ltd., a wholly owned subsidiary of the state-owned SICOM Ltd. until March 1976 and an independent company thereafter and registered under the Companies Act from its very inception.²² The New Bombay Draft Development Plan only confirmed this by stating that New Bombay was expected to be a self-supporting exercise on the DDA model.²³

As a part of the overall understanding between the CIDCO and the state government, the latter was expected to provide a substantial loan to the former in the form of share capital to enable it to start its operations in New Bombay. The CIDCO was also expected initially to raise loans from the open market for which the state government or its agencies would stand guarantee. Since only the government was empowered to acquire land in the project area and land acquisition involved administrative costs apart from payment of compensation, the state government was to undertake this task with the CIDCO paying back the entire costs of acquisition. The statutory terms, finalized in 1972,²⁴ empowered the CIDCO to (a) dispose of land in New Bombay after its development; and (b) appropriate the proceeds to the expenses incurred on development includ-

²²A provision in the Maharashtra Town Planning Act 1966 says that new town development agencies should be given money by the government as advances to be recovered later.

²³New Bombay Draft Development Plan, Op cit., pp.13, 116.

²⁴Government Resolution, General Administration Department, CID-2072-U dated 24 January 1972.

ing administrative expenses plus agency remuneration.²⁵ The balance was to be transferred to the government.

Vagueness about financial costs of New Bombay, as seen earlier, had been started by the MARG piece. The GR defining the relationship between the CIDCO and the state government added further dimensions to it : for, if surplus generated was expected to be transferred back to the government how was the revolving fund, through which the CIDCO was going to build the entire New Bombay, getting established? The pregnant meaning of the GR becomes fairly obvious when the history of the CIDCO's capital structure, contained in Table 7, is examined critically. Paid-up capital, in the form of share capital, secured and unsecured loans comprise three important components of the CIDCO's capital structure. The paid-up capital was Rs.10 lakhs in 1970-71 : it was increased to Rs.100 lakhs in 1971-72 to Rs.200 lakhs in 1975-76 to Rs.270 lakhs in 1976-77 and to Rs.395 lakhs in 1977-78. SICOM has subscribed it hundred per cent. The proportion of this component was about 60 per cent in the first year and has fluctuated between a low of 4.4 to a high of 9.7 per cent thereafter. Secured loans have been entirely coming from the commercial banks and have never been higher than 4.5 per cent. In some years, in fact, they have been less than one per cent. Among the unsecured loans, borrowing from the market through issue of debentures, redeemable in periods varying between 12-15 years, have been resorted to three times so

²⁵Kept at Rs.3 lakhs for the year 1971 to be increased each year by Rs.1 lakh subject to a maximum of Rs.5 lakhs for any year.

Table 7 : Capital Structure of CIDCO Ltd. (Rs. in Lakhs)

B o r r o w i n g s							
Finan- cial Year	Paid-up Capital	Secured Banks	Unsecured				Total
			Debent- ures	Holding Company	State Govt.	HUDCO	
1970-71	10	-	-	16.60	-	-	16.60
1971-72	100	24.25	1208.17	215	-	-	1571.49
1972-73	100	1.06	1208.17	215	-	-	1614.32
1973-74	100	96.45	1593.17	215	-	-	2132.98
1974-75	100	39.98	1593.17	215	-	-	2279.88
1975-76	200	28.81	1593.17	215	125	189.47	2869.72
1976-77	270	101.90	1978.17	215	125	351.11	3778.23
1977-78	395	6.69	1978.17	215	125	550.84	4084.86
1978-79	395	24.26	1978.17	215	200	631.59	4439.39
1979-80	395	52.21	1978.17	215	270	703.95	4779.46

Compiled from Annual Reports of SICOM Ltd., Bombay and CIDCO Ltd., Bombay and New Bombay.

so far (a) $7\frac{1}{4}$ per cent debentures issued for Rs.1208.17 lakhs in 1971-72 and redeemable in 1983-86; (b) $7\frac{1}{4}$ per cent debentures issued for Rs.385 lakhs in 1973-74 redeemable in 1986-89; and (c) $10\frac{1}{4}$ per cent debentures issued for Rs.385 lakhs in 1976-77 redeemable in 1988. These have often accounted for as much as 76.9 per cent and, thus, formed the bulk of CIDCO's capital structure. In percentage terms, their proportion has been declining (from a high of 76.9 in 1971-72 to 41.4 in 1979-80) because of expansion of the size of capital structure itself, although these have been increasing in absolute terms (from Rs.1208.17 lakhs in 1971-72 to Rs.1978.17 lakhs in 1976-77). The SICOM has also provided a soft loan of

Table 8 : Expenditure on and Receipts of New Bombay Project
(Rs. in Lakhs)

Particulars	Upto 1978-79	Incurred During 1979-80	Upto 1979-80
EXPENDITURE			
1. Land and Area Development			
A. VASHI			
i. Physical Infrastructure	490.72	79.14	569.86
ii. Social Infrastructure	70.46	5.30	75.76
iii. Commercial Complex	32.85	15.10	47.95
iv. APM	-	12.86	12.86
Sub-Total	594.04	112.40	706.43
B. CBD BELAPUR			
i. Physical Infrastructure	57.36	29.10	86.46
ii. Social Infrastructure	11.72	0.52	12.24
iii. Commercial Complex	9.59	1.19	10.79
Sub-Total	78.67	30.81	109.48
C. PANVEL			
i. Physical Infrastructure	21.29	19.13	40.42
ii. Social Infrastructure	-	1.86	1.86
iii. Commercial Complex	-	0.36	0.36
Sub-Total	21.29	21.35	42.64
D. KALAMBOLI WAREHOUSING			
	0.16	56.17	56.34
E. GHANSOLI			
	0.06	-	0.06
F. URAN			
	11.90	11.28	23.18
Total (A to F)	706.14	232.01	938.14
2. Housing			
A. VASHI	670.17	67.27	737.44
B. CBD BELAPUR	81.05	28.63	109.68
C. PANVEL	0.07	2.07	2.15
Total	751.28	97.98	849.26

Table 8 (contd.)

Particulars	Upto 1978-79	Incurred During 1979-80	Upto 1979-80
3. City Scale Development	345.88	12.84	358.73
4. Transportation	232.58	49.26	281.85
5. Rehabilitation	95.43	12.40	107.83
6. Studies, Surveys, Seminars	27.64	0.46	28.09
7. Loss on Hovercraft A/c	38.71	2.58	41.29
8. Loss on Bus A/c	0.51	31.30	31.81
9. Provision for Doubtful Advances	4.12	-	4.12
10. Expenses Transferred on New Bombay A/c	1291.23	231.25	1522.48
Total (1 to 10)	3493.53	670.09	4163.61

RECEIPTS

(Disposal on Behalf of State Government)

1. Sale of Tenements, Shops, etc.

A. VASHI

i. Flats	630.69	172.10	802.79
ii. Shops	33.99	8.64	42.63
iii. Hospital	19.52	-	19.52
iv. School (in Sector I)	27.18	-	27.18
v. School (in Sector II)	14.00	-	14.00

Sub-Total	725.37	180.75	906.12
-----------	--------	--------	--------

B. CBD BELAPUR

i. Flats and Tenement	54.39	-	54.39
ii. School Building	-	14.00	14.00

Sub-Total	54.39	14.00	68.39
-----------	-------	-------	-------

Table 8 (contd.)

Particulars	Upto 1978-79	Incurred During 1979-80	Upto 1979-80
2. Sale of Plots			
i. Vashi	146.80	15.71	162.50
ii. APM	-	140.75	140.75
iii. CBD Belapur	-	12.76	12.76
iv. Nhava-Sheva	1.50	6.14	7.64
v. Kalamboli	-	96.48	96.48
vi. Panvel	-	80.00	80.00
vii. Uran	-	498.50	498.50
viii. Gaothan Expansion Plots	-	1.84	1.84
Sub-Total	148.29	852.17	1000.46
3. Service Charges	35.89	17.71	53.60
4. Miscellaneous Receipts	63.76	21.45	85.22
5. Recovery of Overheads from BMRDA	-	6.12	6.12
6. Agency Charges for APMC Work	-	6.19	6.19
7. Sale of Medical Equipment	6.70	-	6.70
8. Net Bus Earnings	18.24	-	18.24
9. Depreciation on Buses	68.50	22.73	91.23
10. Depreciation on Hovermarine	11.18	-	11.18
Total (1 - 10)	1132.32	1121.13	2253.45
Amount Unrealized	2361.20	451.04	1910.16

Source : Annual Report 1979-80, CIDCO Ltd., Bombay and New Bombay.

Note : Figures rounded.

Table 9 : Annual Profit/Loss by CIDCO Ltd. (Rs. in Lakhs)

Financial Year	Profit (+) or Loss (-)
1970-71	3.38 (-)
1971-72	2.60 (-)
1972-73	2.08 (-)
1973-74	3.27 (-)
1974-75	4.01 (-)
1975-76	1.93 (-)
1976-77	1.58 (-)
1977-78	2.28 (-)
1978-79	0.36 (-)
1979-80	1.47 (+)

Compiled from the Annual Reports of SICOM Ltd., Bombay and CIDCO Ltd., Bombay and New Bombay.

Rs.215 lakhs at 6 per cent interest in 1971-72 and the state government extended one loan of Rs.125 lakhs in 1975-76 another of Rs.75 lakhs in 1978-79 and a third of Rs.70 lakhs in 1979-80. The Housing and Urban Development Corporation (HUDCO) has provided loans since 1975-76 which have been varying between 6.6 to 14.7 per cent of the CIDCO's total capital structure. Thus, even after expiry of 10 years the CIDCO has been relying on the scarce governmental finances rather heavily much against its proclaimed aim of self-sustained development.

An analysis of the working financial results of the CIDCO as reflected in the expenditure and receipts on the one hand (Table 8) and annual profit/loss incurred (Table 9) on the other makes it clear that the operationalisation of land as a resource in New

Bombay has been a very agonizing experience. At the end of first nine years (1970-1979), the receipts had been roughly one third : two-thirds of the investment made remained unrealized. The situation appeared to have turned for the better thereafter since at the end of 10th year (1979-80), the receipts increased to 54 per cent. However, this somewhat better liquidity, as is evident from Table 8, was achieved almost entirely due to significant sale of undeveloped land lying outside the nodes being developed by the CIDCO to the bulk users.²⁶ More importantly, the CIDCO has been incurring annual losses in the first 9 years and has registered a notional profit in the tenth year. Any hope of developing a significant looking revolving fund to sustain an accelerated tempo of developmental work in New Bombay lie unrealized. Very candidly, the CIDCO itself has now left this non-realizable pursuit and its current thinking is to go in for large-sized soft loans from a large number of agencies (i.e. IDA, central and state governments, medium and short-term lending institutions) and floating of subsidiary companies looking after specific civic amenities (i.e. Bombay Metropolitan Road Transport Corporation Ltd.) and with facility to independently seek finances for themselves.²⁷

²⁶ This was no coincidence. On the other hand, this was the principal advice given by the CIDCO's financial consultants M/s Ajgaonkar & Company through a report submitted in 1978. It is not exactly robbing Peter to benefit Paul but it comes pretty close to it.

²⁷ A detailed view could be had from Multi Sector Urban Development Projects for New Bombay, (Bombay, CIDCO Ltd., 1980). Of the total outlay of Rs.399.90 crores envisaged for its 1981-85 plans the CIDCO expects Rs.189.58 crores (47%) from the IDA, Rs.43.56 crores (11%) from HUDCO, Rs.23.70 crores (8%) from the Government of India, and Rs.54.17 crores (14%) from the buyers of housing and social infrastructure. The DCIDCO itself would contribute only Rs.72.43 crores

VII

Factors Responsible for Non-Realisation of Self-Sustained
Growth of New Bombay

The conclusion which emerges from the preceding section calls for tentative identification of factors which resulted in the non-realisation of self-sustained growth of New Bombay. It is easy enough to put the entire blame on the CIDCO Ltd. without referring to the context, conceptual and methodological choices made and role played by numerous other agencies in the operationalisation process. From my analysis of facts, figures, and motives, the following emerge important factors :

1. Conceptually, the visualisation of New Bombay assumed a congruence between development finance and regional planning strategies. In reality, the two strategies are, unless tactically reconciled, incongruent : the former following the market forces and the latter attempting to reshape them. Operation of the development finance strategy produces best possible results when it is confined to the remunerative commercial projects, as for example attempted by the DDA in Delhi, where the revolutions of the money invested are in quicker cycles, gestation period short, project margins higher and sale potential very attractive. In other words, it is generally used for localized development : all major city structure, and/or

(18.1%). It is quite another thing that the BMRDA, which appraised this report for recommending it to the state government clearly felt that IDA funds would not be available and that CIDCO lacked organisational capability to undertake works at an annual average expenditure of Rs.80 crores.

regional infra-structures are financed either through an independent source/agency or they are not a prerequisite for local development at all. Having addressed itself to the more ambitious task of developing total city of two million population in 20 years the CIDCO hardly had much choice left but to develop a few nodes and large scale city structure projects in New Bombay. This was bad enough. In later years, it was persuaded to embark on several other projects in scattered locales (i.e. Bandra-Kurla, New Aurangabad, New Nasik, New Nanded, Tarapur, Maisamal and New Nagpur). None of its projects had a short gestation and some projects, especially of the city structure in New Bombay, had an indefinite and indeterminate period of allocation and realisation of costs incurred on them. It was given funds by the state government and state owned SICOM only for the New Bombay project : it invested its own scarce funds in all other projects. Thus, investment followed broadcast, dispersed approach and organisational capability was diluted. Liquidity was, consequently, the biggest casualty in the process.

2. Several contextual factors have contributed to cost maximization and profit minimization (or even elimination). A city develops - and develops fast - if it has an independent and sound economic base. New Bombay had only derived status : its name and concept reflected this identity, several other pronouncements to the contrary notwithstanding. First, as I have pointed earlier, a large area inside New Bombay was already siphoned off by the MIDC. As a result, the CIDCO had considerably reduced scope for generating quick profits through sale of industrial plots. Second, environ-

mental considerations made the CIDCO lay the policy guideline of not allowing location of large-sized industrial units in New Bombay. Third, peculiar topography and terrain made cost of reclamation and development scale dizzy heights. Quite often these costs had to be allocated to different nodes thereby increasing the unit costs of the land uses and, in turn, making it harder to market. Fourth, the inter-relationship between different central functions, presently overcentralized in the southern most tip of Greater Bombay, was far too strong as to be successfully wooed by presence of only better quality of life in New Bombay : shifting of central functions of the quality and force as are operative in Bombay's CBD had be a 'bunched' or 'basket' operation to succeed. As ruefully admitted by D'Souza,²⁸ this was clearly a herculean political task left with the CIDCO : the political forces, once expected to facilitate it, actually worked overtime to substantially increase its magnitude. CBD interests seldom move on their own and have not done so in Bombay.

3. Pursuit of contradictory policies by the Maharashtra Government, mid-stream intervention roles played by the Bombay Municipal Corporation and the BMRDA, and lackdaisical turbulence negotiation strategy followed by the Bombay Port Trust (for the Nhava-Sheva port) have all added to the CIDCO's financial misery. By deciding to build New Bombay, Maharashtra Government had made one policy choice, namely to build a 'counter-magnet' across the harbour. This decision required matching, and politically speaking, hard decisions to relocate assembly secretariat and all important offices to New

²⁸Personal discussion, op. cit.

Bombay, completely stop the Backbay project, and exert sustained pressure on the tertiary sector to move to the CBD at Belapur. It did nothing of the kind. On the other hand, it continued to expand Backbay project and put specific brakes on the decongestion efforts of the CIDCO (such as shifting of vegetable and fruit market etc.).

While New Bombay was being built, growth of Greater Bombay continued unabated. The Bombay Municipal Corporation with the encouragement and help of Maharashtra Government has been slowly though surely implementing many of the Wilbur Smith proposals. And the BMRDA, ever since it came on the scene in 1975, has embarked on the development and regulation of the entire BMR including Bandra-Kurla, Greater and New Bombay. Its efforts, thus, involve development of the interactional profile between Greater Bombay and its satellite small towns in the region on the one hand and New Bombay on the other. At the theoretical level and in the ultimate analysis this forms part of an integrated plan of developing the total Bombay metropolitan region. In the short and medium run, however, the CIDCO's plan of attracting migrants and decongesting Greater Bombay was and is taking a big beating because of these efforts.

The Nhava-Sheva project was a key component of New Bombay 'growth and viability'. Turbulence pertaining to this project, identified earlier, was not very imaginatively negotiated by the Bombay Port Trust. First, it allowed the Planning Commission to digress and dilute the main issue of the option, namely the chronic need to decongest and relieve pressure on Bombay

harbour.²⁹ Second, its political handling of the case with the state and the central governments was hardly upto the mark with the result that the urgency and importance which needed to be accorded to the project at political level was not obtained. Third, while the whole country was aware of the site of proposed Nhava-Sheva port it remains a mystery how the ONGC succeeded in getting allocation of substantial amount of land on the Nhava island that too much against the wishes of the CIDCO.³⁰ This setback too could have been - in fact, it can still be - converted into an opportunity in the national interest to work out a DPR of Nhava-Sheva³¹ attempting an integrated port and ONGC shore facilities project. Instead, it is fighting a losing battle with the ONGC, Ministry of Petroleum and Chemicals on the one hand and the CIDCO on the other. Inevitably, the sanction, installation of the port and port-based industries in New Bombay is getting jeopardized. New Bombay suffers in turn.

4. Organizational structure of CIDCO, its internal climate, processes and systems led it to follow some methodologies which posed considerable problems, and increased its costs. Organisationally, CIDCO has been an engima. It was a company registered under the Companies Act, working as a New Town Development Authority for New

²⁹The discussion instead shifted to future growth of traffic at Bombay harbour. This made the debaters gloss over the difficulties being experienced in handling the listed quantity of traffic.

³⁰CIDCO was forced by the state government to allot land to the ONGC at Nhava island. The Draft New Bombay plan approved by the state government had reserved both the islands for the port.

³¹This is being prepared by M/s Howe India Private Ltd., a consulting firm with tie-up arrangements with the Canadian and American consulting companies.

Bombay (and special planning authority for many other towns later), planning, developing, marketing, and administering New Bombay. During 1971-74 when most crucial decisions were taken committing the organisation to irrevocable series of options, it employed parallel and at times conflicting systems (i.e. establishment and personnel sections; time accounting and PERT management information systems; discipline based and task based groups; inside groups controlled and managed by outside consultants; general overstaffing in the midst of selective scarcity of specialized talent; heavy percentage of aged 'on loan' employees in key sections of establishment, rehabilitation, finance from very conservative institutions in a creative organisation manned by new entrants, etc.). While there was considerable openness in the planning wing horizontally, it was almost totally absent vertically. As such, quite often the CIDCO professionals ended up in finding conceptual, methodological and financial justifications for ideas coming from top.³² These decisions had their financial implications and ultimately got reflected in the per unit cost of the marketed land in New Bombay.

The CIDCO felt that its 'financial arrangements' provide a means of tapping private capital, and using it for a public purpose. It also felt that 'all development costs, including costs of providing improved urban and social amenities are to be met by realising funds through disposal of land'.³³ The methodology adopted was to

³²One might be hard put to find justification for/experiments such as the prefabricated housing in Vashi and operation of hover-marine. don quicksotic

³³New Bombay Draft Plan, op.cit., p.8.

acquire land, at cheap rates, develop it (physical and other infrastructure, etc.) and sell to generate funds enough to repay its borrowed capital and develop a revolving fund. In its enthusiasm, it also decided to sell constructed housing at cost with a system of cross subsidies. Only commercial developments were to be disposed using commercial mechanism to generate surpluses to be used, among other things, for providing improved social infrastructure.³⁴ The costing and pricing of developed land inside and outside the nodes has, however, worked against the interests of the buyers of the former. This is due to the fact that, apart from cost of land acquisition, development, and construction, these have also got allocated costs (of the city structure, interest servicing, administration) added to them. Loading of all the costs on the buyers keeps a larger number of them out from purchasing them reducing the marketability of the products. The bulk buyers of land outside the nodes are getting away with comparatively lighter lease fee. Since only a part of the cost of city structure development is being allocated to the few nodes being developed, its larger part remains locked up. The CIDCO's experience of marketing social infrastructure (i.e. schools, hospitals, etc.) also indicates that the buying agencies insist on deferred payment at concessional rates of interest.³⁵ To sum up, CIDCO's liquidity position has not been very impressive although it has picked up admirably during the last two financial years.

³⁴ Ibid, p.13.

³⁵ This is also accompanied by their tendency to collect unauthorised
 rix: tions under various pretexts and subterfuges.

VIII

New Bombay : Lessons From The Experiment

Launching of New Bombay was a big gamble in developing a major counter-magnet city in the frightful shadow and influence of a major metropolis. Ten years after that event, what does its rich and varied experience through trial and error approach offer to the planners and policy-makers? Although this country and its leadership has seldom displayed the habit of learning from past history, I am extracting a few important lessons from New Bombay experiment for what they are worth.

4575

1. Phenomenal growth of metropolis and acute centralization of central functions in its CBD can not be possibly avoided in a stratified capitalist society. Since these two processes continue unabated and the city keeps on expanding vertically and horizontally, circulation and quality of life become major problems which affect the poor, the weakest, the unorganised segments most adversely. Renewal, and restructuring exercises are ideologically so planned as to make the same segments bear their pains (i.e. demolition, resettlement, land acquisition, etc.) : the monopoly and non-monopoly capitalist class and their associates which have multiplied the felt problems almost always escape this trauma and destabilization. If a new city is being built nearby, as was the case in New Bombay, the poor of that area are deprived of their land and means of livelihood and the cost of developing the city is mainly borne by the initial settlers. The very segments, which exploited the potential of existing metropolis to the hilt and contributed in no small

measure to its unmanageable problems, again succeed in obtaining the best possible terms in the new city under various pretexts. To avoid this double disadvantage to the poor and double benefit to the wealthy, twin city planning has to be an exercise in shock therapy for the business, trade, manufacturing, tertiary sectors first. Only then the twin processes of new city development and old city restructuring could be properly dovetailed. In any case, the relocation and restructuring decisions would have to be a bunching exercise and accompanied by a package of incentives and dis-incentives. The need for very high level of political courage could hardly be overemphasized.

2. Since bigger cities continue to grow despite much talked about deterioration in the quality of urban life, it is obvious that they continue to retain potential for further exploitation. Men like D'Souza now concede that embarking on New Bombay was not one of the very wise steps.³⁶ Perhaps, much better results could have been achieved by strengthening the satellite towns in the Bombay metropolitan region including development of the Uran, Panvel and perhaps Vashi. It would be a wiser policy to plan larger number of smaller urban settlements in metro-regions with highly assertive growth impulses than further expanding a very highly congested centre. The strategy would also be advantageous to make mid-stream changes less costly exercises in such cases.

3. Development of total cities of the nature, complexity and extent seen in New Bombay can not be managed through the use of

³⁶ Personal discussion, Op cit.

land as a resource. Obviously, some kind of compartmentalization involving differentiation between nodal and non-nodal development, commercial and non-commercial development, nodal and city structure development and physical, social and civic infrastructure development would have to be made for raising the finances of such outlays and in marketing. While overall city structure and nodal planning must remain the sole responsibility of one single agency, subsidiary organisations, working under its umbrella, must be established to develop all these and to independently obtain soft-loans and advances from the governments, their agencies, financial and term-lending institutions and the market. The centralized planning agency should frame and employ turbulence negotiation strategies involving itself with (i) governments and governmental policy-laying, fund-donor agencies, (ii) institutions expected to establish crucial components of city plan, (iii) project affected people, relocation target groups and political parties.

4. Twin-cities have generally not succeeded. One of the two - usually the older one - has almost always kept the other in the background and subsequent interventions from various directions have not allowed a distinct identity to emerge for the latter. Therefore, an independent economic base - manufacturing or office sector based - must be provided for the envisaged city to save such exercises from utter failure.

PUBLICATIONS

I Books, Project Reports and Occasional Papers :

1. TS Papola, VN Misra, HS Verma, RC Sinha and A Joshi : *Studies on Development of Uttar Pradesh*, GIDS, 1979, (Distributed by Universal Book Distributing Company, Lucknow)
2. TS Papola : *Small Scale Industries in Uttar Pradesh* (Mimeographed Report, 1978)
3. : *Spatial Diversification in Manufacturing Activity* (Mimeographed Report, 1978).
4. : *Urban Informal Sector in Developing Economy* (under publication with Vikas Publishing House Pvt. Ltd., New Delhi, 1981).
5. HS Verma : *Post-Independence Change in Rural India* (Published by Inter-India Publication, New Delhi, 1981).
6. TS Papola, RS Mathur : *Inter-Sectoral Linkages in Metal Engineering Industry in Kanpur* (Mimeographed Report, 1979). Also brought out as a *Working Paper* (WEP 2-22/WP) by ILO, Geneva, December 1979.
7. HS Verma : *Impact of Family Structure on Management of Enterprises* (Ph. D. Thesis, 1979).
8. TS Papola : *Spatial Diversification of Industries : A Study in Uttar Pradesh* (Under Publication with Allied Publishers, New Delhi).
9. TS Papola, VN Misra : *Studies in Rural Industrialisation : Issues, Data Requirements and Analysis* (Mimeographed Report, 1980).
10. TS Papola : *Production of Woolen Carpets in Kumaon and Garhwal* (Mimeographed Report, 1980)
11. : *Impact of Concessional Finance on Industrial Development of Backward Areas* (Report, 1980). Mimeographed by IDBI, Bombay.
12. MS Ashraf : *Economics of Cloth Printing in Decentralised Sector* (Mimeographed Report, 1980).
13. : *Report of the Seminar on Development of Hill Areas* (Printed Report, GIDS, 1980)
14. TS Papola : *Income Distribution, Technology and Employment : A Study of Metal Utensils in India in the Basic Needs Framework*.
15. TS Papola, RC Sinha : *Road Transport and Economic Development : A Study in Uttar Pradesh* (Institute of Developing Economics, Tokyo, 1981)
16. TS Papola : *Rural Industrialisation : Approches & Prospects* (Mimeographed, GIDS, 1981)
17. TS Papola, RT Tewari : *Impact of Concessional Finance on Industrial Development of Backward Areas : (A Study in Uttar Pradesh)*